Published Monthly
June – September
Volume 4, Issue 2

Northwoods Journal

July 2006

Enjoying and Protecting Marinette County's Outdoor Life

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Waterfalls on the Pike River

Most of the falls on the Pike are located on public land and can be accessed by short walking trails. Recently the Marinette County Tourism Alliance developed a "Waterfalls Tour" and improved signage to help visitors find the waterfalls. The 2006 Marinette County Tourism Guide contains excellent driving directions and descriptions of the various falls of the Pike and can be picked up free at many gas stations, restaurants, and other tourist establishments in the area. If you want a quick tour of the falls, the largest concentration is found on the North Branch of the Pike along Twelve Foot Falls Road. Two of the most spectacular can be found in Twelve Foot Falls County Park.

The largest and most popular falls on the Pike River is Dave's Falls, located in Dave's Falls County Park just south of Amberg on Highway 141. It was named for a logger who lost his life there in a log drive. The park has a footbridge over the river and provides a beautiful picnic area with stairs to the falls. All of the falls can be dangerous, so care should be taken when viewing them.

To learn more about the history of the Pike River and the Town of Amberg, visit the

Amberg Historical Museum
W9289 Nutt Road, Amberg, WI
Open Memorial Day through Labor Day
weekends and holidays 10am to 4pm

Destination.... Marinette County
The Pike: A Wisconsin Wild River

By Chuck Druckrey, Water Resource Specialist
& Amanda Kostner, Education Specialist

If scenic rivers and great fishing are your thing, Marinette County is the place to be. To the east we have the Menominee, a large river where sturgeon and walleye abound. Flowing through the center of the county you will find the Peshtigo. With its whitewater and flowages it forms the backbone of tourism in Marinette County. Then there is the Pike, a much smaller river, and perhaps lesser known, but in every way equal to its larger neighbors.

The Pike originates in the forestlands of Goodman and Dunbar then flows southeast through Athelstane and Amberg before emptying into the Menominee River northeast of Wausaukee. Together with its many tributaries, it drains more than 175,000 acres, almost all located within Marinette County.

Its central location and dependable water supply made the Pike River an important river to the logging industry of the 1800's. Logs were cut in the forests along the Pike and its tributaries and driven down to the Menominee River, eventually ending up at one of the sawmills in Marinette or Menominee. In the logging heyday there were 15 dams on the Pike to harness its flow. The dams were used to build up a head of water and then opened to carry logs downstream to the next dam. Each dam had a camp for river drivers and dam operators. In the winter, more camps for loggers were set up. Eventually businesses moved to the area to supply the logging camps and the workers from a quarry to the east. Families moved in and the Village of Pike was born. It wasn't until some years later that the village was renamed Amberg.

For the native people, the Pike River was a western route to hunting lands and blueberries. According to written accounts it was also filled with trout, which were undoubtedly an important part of their diet. Although it's hard to know exactly who the first residents along the Pike River were, when European explorers and settlers came they encountered Ojibwa, Menominee, and Potawatomi people here. These three tribes had a similar culture and lived in peace with each other. A native village was located at the mouth of the Pike River where it meets the Menominee River.

Today the Pike is known for its many waterfalls, outstanding scenery and excellent trout fishing. From the headwaters of Sydney Creek to its confluence with the Menominee, the Pike falls almost 780 feet. Along its length it tumbles over and through many granite outcrops and ledges forming numerous rapids and waterfalls. It was this natural scenic beauty that led to its designation as a State Wild River in 1965. This designation preserves and protects the Pike River in a free flowing natural state for future generations. The Wild River designation also allows the Wisconsin DNR to purchase river frontage along the Pike from willing sellers, restore natural shoreland habitat and protect the Pike from further development. Today, public ownership and conservation easements have protected most of the Pike River in its natural state.

If you are a trout fisherman you are probably already familiar with the Pike River. All of the Pike upstream from County Highway K and most of its tributaries support trout. According to the DNR, the Pike River system contains 123 miles of Class I trout stream that have self-sustaining brook trout population. More than 60 miles of Class II and III trout water also support native fish and are stocked annually with brown trout. Along the main stem of the Pike and its north and south

THE PIKE continued on page 8

Hit the Trail

Trails in Marinette County

Thunder Mountain Trail System

By Erik Aleson, Marinette County Parks

Thunder Mountain Overlook County Park, west of Crivitz, provides breathtaking views and scenic trails. The trails are well maintained and excellent for hiking or mountain biking. Signs along the trails provide direction in this remote park. A new picnic area and restroom facilities are available to better serve those who wish to spend a full day in this peaceful setting.

The mountain was, according to legend, named by the Native Americans because of the mysterious characteristic that allows footsteps on top of the hill to be heard distinctly by those near the bottom. While it is not close to the state's tallest points – Timms Hill at 1,952 feet and Rib Mountain at well over 1,900 feet – Thunder Mountain, at 1,410 feet, is one of the highest in northeastern Wisconsin. This makes for one of the most spectacular views in our area! Both Caldron Falls and High Falls Flowages on the Peshtigo River are easily visible from here. On a clear day you can see for many miles into Marinette and Oconto Counties.

In the mid-1960's, the Wisconsin Department of Natural Resources purchased the land from private ownership with intentions of developing a new state park there. But after nearly a 20-year struggle to get funding for park development, the DNR sold the property to Marinette County in 1983 for $1. Since then, over the last 20+ years, the park still has remained largely undeveloped and kept in a natural state.

In 2003, a trail system was developed in an effort to provide the public with easier access to these remarkable vistas. Now visitors can explore eight separate loops totaling over 2.5 miles. The unique trail system winds through open grassland, tops three scenic overlooks, and dips down a few steep slopes into the edge of the woods. Signs are strategically located to help mark the trails. The Marinette County Parks & Outdoor Recreation Department mows & maintains these grassy trails for hiking and mountain biking. The use of motorized vehicles is prohibited here.

To drive to the Thunder Mountain Trail System, follow County Highway W west out of Crivitz for 14 miles to Caldron Falls Road. Turn north (right) and travel two and a half miles. Then, turn west (left) off of Caldron Falls Road onto Thunder Mountain Road. Follow Thunder Mountain Road up the hill until it ends at the Thunder Mountain Park parking lot & trailhead.

All vehicles require a day use parks entrance sticker. The cost is $3.00 per vehicle per day. One Day Use sticker can be used at all Marinette County Parks on the day it's purchased. Stickers are to be purchased at the self-registration pay station when entering the park. A $12.00 (per vehicle) Marinette County Parks Annual Vehicle Sticker, valid at all Marinette County Parks for the year, may be purchased at the Parks Office in the county courthouse or various businesses in the county. Thunder Mountain Park opens May 1st and closes November 1st each year.

To access Thunder Mountain Overlook as a side trip off of Marinette County's designated bike routes, turn west off of Parkway Road onto Thunder Mountain Road and then cross Caldron Falls Road. The road takes you to the top of Thunder Mountain to enjoy Marinette County's best view. The last half-mile of the road is gravel and climbs 200 - 300 ft. Bikers without mountain bikes should walk their bicycles on this section.

View from the top of Thunder Mountain

Northwoods Journal

Volume 4, Issue 2

Northwoods Journal focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County.

Published in cooperation by:

- Marinette County Land Information Department, Land & Water Conservation Division
- Marinette County Parks & Outdoor Recreation Department
- University of Wisconsin-Extension

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Check us out on the web at:
www.marinettecounty.com/lw_home.htm

The Scoop on Manure and Our Water Resources

You may have heard about the well problems experienced in Brown County last winter. More than a hundred private wells were contaminated by winter-spread manure. These wells were at risk for contamination because homes and adjacent crop fields were on top of shallow soils over bedrock. Manure was spread on top of snow on several of these fields. During a thaw, melting snow carried manure down through the shallow soil and then through cracks and fractures in the limestone bedrock where the contaminated water entered home wells.

Fortunately, in Marinette County shallow soil over bedrock is uncommon. However, we do have sandy, and in some cases very sandy, soil. In soil with more organic matter and smaller particle sizes, like silt and clay, the precipitation and whatever it is carrying moves downward more slowly. Bits of organic matter act like tiny sponges to absorb and hold water. Soil microbes and rooted plants remove many of the nutrients and additional water. Sand on the other hand, allows rain or melting snow to percolate down very quickly to the water table. Also, where old wells have not been properly abandoned, it can reach deep aquifers.

In winter the situation can be even worse because frozen ground is less absorbent, plant growth is nil, and even microbial activity is much less. We have long assumed that water does not percolate down through frozen ground, but research has proved this wrong. Cracks in the soil have been found to extend down as deep as sixteen feet. Wormholes, which can number in the hundreds of thousands per acre, and burrows of other creatures provide a ready path for downward movement of snowmelt.

Fish kills are also a possibility when manure is winter spread. A major fish kill occurred in Dane County last winter when liquid manure was heavily spread on a snow-covered hillside next to the Sugar River. This incident was part of the 52 manure runoff events documented in 2005. This was the highest number ever recorded by the WDNR. The majority of these occurred in March and April.

If manure is spread during the winter or improperly spread during the growing season there is a chance that manure contaminated runoff can reach your well, especially if it's very near the spread fields or it is a shallow sand point well. Coliform bacteria, pesticides, or high levels of nitrogen, can impact human health. High volumes of organic matter and phosphorus can cause fish kills and algae blooms. Manure should be winter spread as little as possible and it should be incorporated into the soil during the growing season so that the nutrients and organic material are available for crop growth.

The Marinette County Land & Water Conservation Division (LWCD) has long recognized the need to limit winter spreading of manure and to properly close wells that are no longer in use. The best times to spread

Manure continued on page 7

Local Wetland Restoration is For the Birds

By Chuck Druckrey, Water Resource Specialist

Ducks are what landowner Dave Evancheck was hoping to attract when he restored a wetland on his property last year but shorebirds, swallows, egrets and many others have benefited as well. The frogs aren't complaining either and even though much of the wetland has only held water for a few months, numerous wetland plants can now be found where last year only weeds and spruce trees grew.

Dave, an avid hunter, fisherman and owner of Dave's Taxidermy, called the Marinette County Land & Water Conservation Division (LWCD) in the summer of 2004 about impounding water in an intermittent stream to create a wildlife pond on his hunting land. The site consisted of a broad drainageway that carried significant flow during spring runoff but remained dry most of the year. Since the site was already forested and provided good wildlife habitat, it was ruled out for cost-share funding. Further investigation revealed that local soils were also too sandy to hold water.

While explaining to Dave why his pond wouldn't work LWCD staff pointed out that an old drainage ditch behind his shop was just the sort of place that could be restored wetland habitat. When Dave's grandfather owned the property the ditch flowed through farm fields and cattle pastures. Dave farmed it himself until the mid 80's then enrolled the land in the federal Conservation Reserve Program and planted spruce and white pine in the fields. The ditch and low ground adjacent to it reverted to willows and reed canary grass. While the area provided some wetland habitat function, it was severely degraded and dominated by exotic species. In the winter of 2004, LWCD staff surveyed the site, tested soils and studied the upstream watershed to estimate runoff volume and duration. It was determined that a wetland restoration was indeed possible. Dave was going to get his duck pond after all!

LWCD staff developed a wetland improvement plan that called for constructing a 400-foot long dike across the ditch and surrounding drainageway. The dike would impound almost 5 feet of water at the deepest point and flood more than 4 acres of wetland and surrounding fields and some of Dave's back yard. Soil to build the structure was excavated on-site, forming a deeper pool area in front of the dike. The dike was designed to safely pass runoff from a 100-year rain event without overtopping or flooding nearby roads or neighboring properties. A water level control structure was installed through the dike to adjust water levels or drain the pool as needed.

With state and federal permits in hand construction of the dike was started in August of 2005. By the end of September, Dave had a large earthen dike and a very deep, nearly dry hole in his back yard. After experiencing drought conditions all summer long, the "wetland" was dry as a bone and the borrow pit wasn't even half full. Fortunately, Dave was a patient man. Water levels rose slowly during winter and by April the wetland was full.

It didn't take long for the local duck population to notice the changes. As the ice went out ducks and geese moved in. Spring migration brought a steady flow of divers and puddle ducks of all kinds and several times large flocks of geese used the new wetland for a rest stop. Several ducks have also made the new wetland their permanent home. A mallard, a hooded merganser and a grebe have been seen on the water with chicks in tow. And even more exciting for Dave is the flock of wood ducks that seem to favor the flooded willow brush and spruce trees.

According to Dave, the wetland has already exceeded his expectations and things should only get better. Since the wetland is new, submersed aquatic vegetation and emergent plants are sparse. As the wetland matures over the next few years, cattails and rushes will replace the invasive reed canary grass. New species of submersed aquatic plants will fill in shallow water areas. Together these plants provide the food and cover necessary not only for waterfowl production but also for many species of insects, amphibians and songbirds.

Wood ducks benefit from a forested swamp with dead trees for cavity nesting.

Not all wetlands need to be "restored"

Wetland restoration and improvement are techniques that should be reserved for severely degraded wetlands. Flooding a perfectly healthy sedge meadow, floodplain forest, or alder thicket may add some waterfowl habitat but it is done at the expense of wildlife that prefer these other wetland types. Remember that all wetlands, even those without standing water, provide important habitat and water quality functions.

Wetland Restoration Handbook

Originally published in 2000, the Wisconsin Wetlands Association (WWA) updated and published a new handbook in 2004. This award-winning book is a comprehensive guide for landowners interested in restoring, improving and protecting wetlands. The handbook can be ordered through the Wisconsin Wetlands Association by calling 608-250-9971 or visit them on-line at: *www.wiscwetlands.org*. If you are interested in wetland restoration this will be the best $5.00 you ever spent. At the WWA website you can also find links to the DNR web page where the handbook can be viewed on-line.

If you think you have a wetland that can be restored...

There are numerous government and conservation organizations that can help. A good place to start in Marinette County is the county Land & Water Conservation Division at 715-732-7780. Conservation staff can help you evaluate the area for restoration potential and possibly provide technical and financial assistance, or refer you to someone who can.

Nature's Almanac

July 2

By the time July arrives, the hectic pace of caring for the young and continuing to sing has slowed in the bird life around us. The young of most birds have fledged, and although they still demand some care, they are getting more independent.

When the young mature, birds' activities change and they no longer need territories as before. Having less need to declare their home base, birds sing less, and songs that have been with us for nearly two months slowly fade.

Some, of course, do persist: the yellowthroat continues to shout its *"witchity, witchity, witchity"* from the marshes and tall grasses. Even after its family has been raised, this bird remains to feed, proclaiming its presence long after most birds have stopped. Its habitat is unusual for a warbler since most warblers are forest residents.

As might be expected, the yellowthroat is bright yellow underneath. The males alone hide their eyes with a large black mask.

July 14

Skippers – small butterflies that get their name from their rather erratic, jumping type of flight – may be the most common butterflies of midsummer. Many people believe that skippers are not true butterflies because they have a type of antennae different from that of other butterflies, as well as a resting pose that differs. Most butterflies bask with their wings out flat, but skippers bask with hindwings flat and forewings perpendicular.

Skippers are abundant with approximately two hundred and fifty kinds found in the United States. Three of the most common ones are the northern golden, the long dash, and the European. All are less than an inch long with patterns of yellow-gold on the wings. The European skipper has been very successful and may be our most common butterfly. It is common in grassy fields and was brought to this country in the early 1900's. Basking or puddling sites may host hundreds of skippers on hot days.

July 28

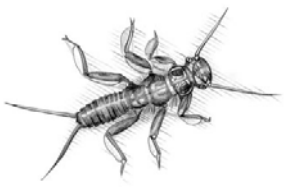
Blueberry time is a favorite season for many northlanders and provides an annual ritual celebrated by berry pickers young and old. Low bushes that held urn-shaped white flowers two months ago gave way a few weeks later to small green berries and now advertise blue-black sweets.

The fleshy berries are actually fruits filled with as many as a hundred seeds, but the seeds do not harm their taste, and they are devoured by many animals, including humans. Though songbirds and small mammals gobble with gusto, it is the black bear who reigns over the patches. Bruins sit among the plants and, in their haste, consume mouthfuls of leaves and twigs along with the desired berries. As they travel throughout the forest, the bears and other critters pass on the seeds in their droppings and help create new berrying sites.

Low woodland blueberries grow best in dry, sandy soil. Moderately tolerant of shade, they grow profusely in the acid soil of jack pine forests. Though it is not needed for the survival of the blueberry bushes, a fire can effectively revive an aging patch by ridding it of old and dead vegetation.

From, "Backyard Almanac," *by Larry Weber*
Illustrations by Judy Gibbs

The Secret Lives of Aquatic Insects



By Greg "The Egg" Cleereman, County Conservationist

Stoneflies

Stoneflies are an important part of the food web in coldwater streams. They are also excellent indicators of water quality since their high need for dissolved oxygen and cold water means they don't occur in unhealthy waters. They are generally creatures of rocky stream bottoms so they are at risk from sediment caused by erosion. There are seventy species of stoneflies in Wisconsin and they may be very common in high quality streams. However, they are never found in numbers great enough to be a nuisance to people.

Although the appearance of stonefly nymphs is quite variable, they all have several characteristics in common. They have long threadlike antennae, a flattened body with widely separated legs, "tufts" of gills behind the head, at the base of legs, or around the anus, and two long cerci. The cerci, which look like a pair of parallel tails, are probably the easiest way to identify a stonefly nymph.

The Cycle of Life

Stoneflies start out life as eggs anchored to the rocks on the bottom of the stream. Only a few days after being laid, the eggs hatch by splitting a special seam. Upon leaving the egg, the young stonefly, called a nymph, begins feeding on algae or decaying organic matter. Depending on the species, the nymph will stay a plant eater, switch to meat, or eat both as it grows. The carnivorous stoneflies are known to eat other insects, fish eggs, minnows and even young salamanders. The plant eating stoneflies may scrape algae off rocks, shred larger leaves, or gather tiny bits of organic matter carried by the current.

Like all insects, the growth of stonefly nymphs is punctuated by a series of 8 to 16 molts. The nymphal state can last for one to four years. Because of that, nymphs of the same species can be found at several different sizes – near microscopic up to almost two inches long. Nymphs are poor swimmers and if dislodged from their rocky home, may drift quite a distance down stream before regaining their grip on the bottom. While nymphs, they actually spend most of their time clinging to and crawling on the underside of rocks. Next time you're wading in a trout stream, grab a rock from the bottom, turn it over and take a look.

Breeding typically occurs in late spring to early summer when there is plenty of cold, oxygenated water. After crawling ashore, the insect works its way out of its nymph exoskeleton. The new adult still has long thread-like antennae and two parallel tails. It also has two large, separate wings. The front wings are long and narrow with cross veins that form distinctive boxes near the center. The hind wings are much shorter and wider near the body and look pleated or folded. Until it spreads and dries out its wings the stonefly can only crawl. Even after the wings are fully functional, most stoneflies are poor fliers. They generally don't stray far from the water.

Males fly or climb onto vegetation to attract a mate. Low-density substrate (twigs and branches) is necessary because the male "drums" its abdomen on the vegetation. The process is similar to what a male ruffed grouse does. The female must be close by because the vibrations from the drumming are transmitted through the substrate, not through the air. The drumming frequency and pattern are different for each species. When the female hears the right drumming pattern, she drums back. This communication goes on back and forth for a while as the pair moves closer together. Eventually they mate.

Fishing the Hatch

Because they lack the bright colors of dragonflies and don't emerge in massive numbers like mayflies and other aquatic insects, stoneflies are not well known to most people. The exceptions are probably trout fishermen. Emerging stoneflies are important trout food and anglers know it. There are dozens of artificial flies with stonefly patterns for fly fisherman. The goal is to "match the hatch." That means make the artificial look as similar in color, pattern, and size as possible to the original. The hatch is the time when nymphs change into adults and emerge from their exoskeletons to embark on nuptial activities. Most stoneflies hatch at night or in low light conditions. Trout anglers love this time because fish lose caution and move into the shallows, chasing stoneflies with abandon.

Fly fisherman can fish the "hatch" in two ways. The first way is to imitate the nymphs that are crawling along the bottom toward shoreline rocks and vegetation. There they shed their skins to finally emerge as adults. Artificial nymphs must be fished under water or "wet." You can often see the tails and dorsal fins of trout sticking out of the water as they feed in water sometimes only inches deep. The second way is to use "dry" flies that float on the water's surface. These simulate adults in the act of egg laying or those that have completed egg laying and are spent. In this case, evidence of feeding trout is in the form of "boils" or swirls on the surface as the fish slurp the stoneflies down. The hatch can occur over a period of a couple weeks or a few days. Fishing is best during compressed hatches.

Stoneflies in general have not gotten the amount of study that other insect families such as dragonflies have received. Their need for high quality water (cold, high dissolved oxygen levels, low turbidity), and in some cases very specific habitat types, makes their future a cloudy one. Many species appear to have always been rare. For these fascinating insects to survive in Marinette County, we need to protect our cold-water stream habitats.

Landscaping with Native Trees & Shrubs

By Scott Reuss, UWEX Horticulture Agent

One of the more adaptable tall native shrubs that can be used in Marinette County is the Nannyberry viburnum, *Viburnum lentago*. This shrub offers many benefits in the landscape, such as bird attraction potential, multi-season color, and filling a height niche that is void in many of our landscapes. Mature height is 10 to 20 feet, depending on site characteristics, with a width approaching 10 feet in diameter. These characteristics allow it to be used as specimen plantings, for hedgerows, stream bank stabilization, or as part of wildlife plantings.

A key feature is its adaptability. It is fully hardy in the Marinette County area and will do well in varying soil moistures, as well as handling light conditions all the way from full sun to around half-shade. Of course, its stature will change according to the amount of sun, as it tends to get leggy in heavier shade, but the flower and leaf color characteristics are fairly consistent. In natural settings, it's most common at an edge, in the interior of a young or disturbed woodland, or where gaps in the canopy allow more light. Although slower-growing than many other common shrubs such as lilac, nannyberry forms a typical shrub structure with multiple stems sprouting from the base and can form large clumps, especially if in full sun.

The creamy-white flower clusters, which open usually in late May in our area, are quite showy. The red stalks contrast the flower color nicely, and the 5-10 cm wide clusters will be present for 2-3 weeks. The disappearance of the flowers does not end the show for this shrub, however. The fruit characteristics are fantastic and the fall foliage color is a dramatic deep maroon color.

The fruit of nannyberry are colorful the entire time that they are present. As they mature, they change from green to showing yellow, rose and pink before finally becoming bluish black at maturity. The oval fruits are about ½ inch long, with a single, flattened seed. The photo shows the mature fruit configuration and the easily-identifiable terminal buds of nannyberry.

The shrub arrangement offers nesting and roosting cover for many songbirds, but the real attraction for many types of wildlife is to target the fruit as a food source. Nearly all fruit-eating songbirds will be attracted to these shrubs, but they are particularly known for enticing cardinals to visit. Other songbirds known to visit and browse on the fruit include robins, waxwings, finches, thrashers, catbirds, and grosbeaks. Grouse, pheasants, cottontail rabbits, and squirrels will also target the fruit, but interestingly enough, deer seldom eat either the foliage or the fruit. This gives it another positive in our deer-infested landscapes, as it has a better chance of successfully establishing.

Plants can be ordered through many sources, but one of the most convenient local sources is the Menominee County (MI) Conservation District's Annual Spring Tree Sale, which usually takes place in April. Contact them at 906-753-4663 to get a copy of their sale catalog. If you have other questions about this or other landscaping issues, contact Scott or Linda at the Marinette County UW-Extension office at 715-732-7510 or 1-877-884-4408.

Forming Lake Associations: Do your lake a favor!

Forming a lake association or district is one of the best things you can do for a lake. Developed lakes that have an association or district typically have better water quality, higher quality of life, and fewer lake user conflicts. Why is this so? Being part of lake group increases communication and understanding between landowners, raises awareness of lake issues, and creates a powerful tool for dealing with problems.

The first step is to become a "qualified" lake association. You can learn about what this entails by contacting the Marinette County Land & Water Conservation Division (LWCD) or the WDNR Service Center in Peshtigo. Membership in the association is voluntary but once formed the association can do many things to protect and enhance a lake. Projects completed by lake associations in Marinette County include maintaining lake access, removal of nuisance aquatic plants, fish habitat improvement, fish stocking, and gypsy moth spraying. Marinette County currently has nine qualified lake associations. They are located on Crane Lake, Gilas Lake, Glen Lake, Hilbert Lake, Morgan Lake, Big and Little Newton Lakes, Lake Oneonta, Sandstone Flowage, and Thunder Lake.

The next level up from a lake association is a lake district. This can be formed in one of four ways: 51% of the landowners in the proposed district can petition the town or county board; owners of 51% of the land in the proposed district can petition the town or county board; by resolution of a village board or city council; or by conversion of sanitary district. Projects and programs completed by lake districts in Marinette County include nuisance aquatic plant management, purchase of sensitive areas, dam operation, and gypsy moth spraying. Currently there are three lake districts in Marinette County – Lake Noquebay Rehabilitation District, McCaslin Lake Protection and Rehab District, and Beecher & Upper Lake District.

Qualified lake associations and lake districts are eligible for funding through a competitive lake grant program run by the WDNR. The grants pay for 75% of eligible costs for the kinds of projects listed above. The LWCD can help you understand the process and assist with the grant applications. We have worked with several lake groups to create lake and aquatic plant management plans, to restore shoreline, and to purchase aquatic plant harvesters.

If you would like to learn more about lake associations and districts or see what projects those in the county are doing, contact the LWCD at 715-732-7780 or visit: *www.marinettecounty.com/lw_watres_lakead.htm* .

ROTATIONAL GRAZING:
GETTING THE MOST FROM YOUR LAND

Have you ever thought about raising livestock of any type on your land, but thought it was too expensive, too much work, or just not worth it? One way to maximize your land's productivity is to use a management practice known as rotational grazing.

Many people see the word "grazing" and say, *We used to do that years ago*. However, there is a big difference between rotationally grazing and pasturing animals. A pasture is a large fenced-in area to which animals have continuous access. In rotational grazing systems, we still use a perimeter fence, but break the area up into multiple smaller units through which the animals rotate, only having access to one area at a time.

This movement allows the animals to capture a significantly higher percentage of the forage produced on each acre, allows for better wildlife habitat, songbirds especially, and allows for better animal performance as the forage is higher quality and of more consistent quality. It also allows for healthier waterways as banks and edges are kept in better vegetative cover, allowing less soil erosion to reach surface waters.

Landowners with small acres can reap financial gain by properly using rotational grazing. Whether it is changing a current system for your cattle, horses, or other livestock, or a new operation like raising your own beef, hogs, or pastured poultry, you can save money or create income by properly managing your land.

If you would like to learn more, contact one of these local resources:

Scott Reuss, UW-Extension Agriculture Agent, 715-732-7510 or 1-877-884-4408

Jodie Risner, Natural Resource Conservation Service, 715-735-6122

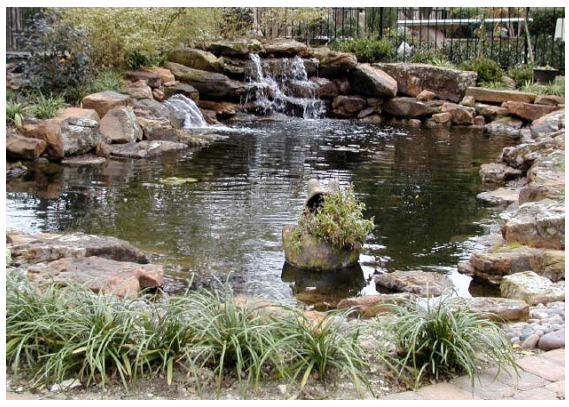
Rick Adamski, Grazing Consultant for Lumberjack RC&D, 920-833-6704

Northwoods Journal Online

Would you like to read the *Northwoods Journal* on the Web? It is posted monthly on the Marinette County website at *www.marinettecounty.com/lw_journal_home.htm*

We can even send you an E-mail reminder when each month with a direct link to the site. To set it up, contact Amanda at *akostner@marinettecounty.com*

Invasive Species Profile: Water Garden Invasives



By Kendra Axness, UWEX Basin Educator

Exotic species are plants and animals that spread into an ecosystem beyond their normal range. Exotic species can come from another watershed, state, country, or continent. Invasive species are plants and animals that, once established, take over an ecosystem because they are able to out-compete other species for habitat. Both native and exotic species can become invasive if the conditions are favorable for them.

What are water gardens?

Water gardens are pond-like landscape features, filled with a variety of aquatic plants and animals. Pumps and filters can be included to ensure that the water quality is good enough to support fish like goldfish or koi.

According to a June 2006 article in *Madison Magazine*, water gardening is one of the fastest-growing facets of the landscaping industry. Manufacturers have begun selling kits that make building a pond very easy, and there are many vendors that supply aquatic plants and other organisms. The local popularity of these landscape features is highlighted by the recent formation of several chapters of the North American Water Garden Society (NAWGS) around the state – there are now chapters in Madison, Janesville, Saukville, Forestville, Wausau, Larsen, and Wales. However, water gardens can also contribute to the spread of invasive species if not done properly.

Why are water gardens a concern for management of invasive species?

Just like traditional gardeners, water gardeners value ornamental species and often purchase those that are not native to their geographic area. Species that are attractive or beneficial within the confines of a decorative pond or aquarium may be harmful to natural pond, lake and stream ecosystems. In addition to ecological impacts, invasive species have significant economic and aesthetic impacts for communities, lakefront property owners, and recreational users.

Purchased plants and animals may be accompanied by "hitchhikers." In 2002, the University of Minnesota Horticulture Department conducted a study to assess the risks of importing aquatic plants to Minnesota. Researchers ordered plants from nurseries nationwide by phone and Internet and found that 93% of orders contained hitchhikers. They also found that plants that were prohibited in Minnesota were easy to obtain from out-of-state companies: vendors filled 12 of 13 orders for prohibited plants such as purple loosestrife.

How can water garden plants and animals reach natural water bodies?

Natural processes like flooding, wind, and wildlife movement can transport seeds, plant fragments, or aquatic organisms from a water garden to a nearby lake, stream, or wetland.

Plant enthusiasts can also spread invasive species by sharing specimens with friends and gardening club members, or by releasing unwanted plants and animals into natural waterways. Gardeners moving south sometimes transport plants that are controlled by our winters, but thrive in warmer climates and become invasive.

Finally, retail outlets may contribute to the spread of invasive species by selling invasive plants. They can sell these plants unless specifically prohibited by state or federal laws. Even prohibited plants can end up being sold if the retailer is unaware of the restrictions or unfamiliar with a plant's scientific name as common names often differ from one area to the next. Sometimes, plants are sold with hitchhiking plant fragments or invertebrates that may themselves become invasive.

Potentially Invasive Water Garden Plants and Animals

Wisconsin DNR, UW-Extension, and Minnesota and Michigan Sea Grant programs recently completed a set of educational materials that highlight the following species as potentially invasive water garden plants and fish:

- Yellow Iris (Iris pseudocorus)
- Hydrilla (Hydrilla verticillata)
- Water Hyacinth (Eichhornia crassipes)
- Water Lettuce (Pistia stratiotes)
- Water Velvet (Azolla pinnata)
- Purple Loosestrife (Lythrum salicaria)
- Eurasian Water Milfoil (Myrophyllum spicatum)
- European Frogbit (Hydrocharis morsus-ranae)
- Flowering Rush (Butomus umbellatus)
- Curly-leaf Pondweed (Potamogeton crispus)
- Fanwort (Cabomba caroliniana)
- Water Chestnut (Trapa natans)
- Parrot Feather (Myriophyllum aquaticum)
- Giant Salvinia (Salvinia molesta)
- Indian Swampweed (Hygrophila polysperma)
- Western Mosquitofish (Gambusia affinis)
- Koi (Cyprinus carpio)
- Goldfish (Carassius auratus)

Many of the plants are still available commercially so it is very important for water gardeners to be aware of these potentially invasive plants when deciding what to purchase.

Native Species for Water Gardens

Native plant species that water gardeners might consider using include the following:

- Arrowhead (Sagittaria latifolia)
- Pickerel Weed (Pontederia cordata)
- Cardinal Flower (Lobelia cardinalis)
- Blazing Star (Liatris psycnostachya)
- Blue Flag (Iris versicolor)
- Marsh Marigold (Caltha palustris)
- Monkey Flower (Mimulus ringens)
- White Water Lily (Nymphaea odorata)
- Elodea (Elodea Canadensis)
- Bottle Brush Sedge (Carex comosa)
- River Bulrush (Scirpus fluviatilis)
- Turtlehead (Chelone glabra)

While koi and goldfish are the most common fish selected for water gardens, some larger ponds can be stocked with native game fish such as bass, bluegill, and sunfish. Pond owners should be aware that if they are stocking a pond with fish, a fish-stocking permit is required (for more information visit *www.dnr.state.wi.us/org/water/fhp/fish/faq/stock.htm*). Fish can be obtained from private fish hatcheries. Pond owners may obtain fish through their own hook and line angling efforts, but need to follow state fishing regulations for the waterbody on which they are fishing and also obtain the fish-stocking permit.

Water Gardeners Can Help Control Invasive Species

Once a species has been introduced into the environment, complete eradication is usually impossible. Prevention is often the best approach.

- Choose a reputable nursery: ask if the vendor is aware of what species are regionally and federally restricted, and verify that plant identifications and their scientific names are correct.
- Examine plant orders for any unwanted hitchhikers: rinse plants in a bucket of tap water until they are clean; use a light-colored bucket to help you see hitchhikers.
- Dispose of cuttings and unwanted plants by freezing and then placing in household trash, or seal in a plastic bag and then place in trash.
- Never include cuttings or unwanted plants in compost (seeds can be tolerant of freezing and drying).
- Never dump unwanted plants or plant materials into a waterbody.
- Create water gardens only in areas isolated from waterways to avoid accidental release.
- Use native plant species.
- Report any releases to a local resource agency.
- Know local, state, and federal laws.

MORE INFORMATION

Water gardeners should contact their local DNR service center for guidance on obtaining any needed permits for water garden installation and maintenance.

More information about water gardening and invasive species is available through Habitattitude, Visit their web site at: *www.habitattitude.net*.

To view educational materials such as posters, flyers, plant sticks, and tip cards about water garden invasives, visit: *www.seagrant.umn.edu/exotics/ais_wg_materials.html*

Who You Gonna' Call?

Spotlighting natural resource and conservation professionals working in Marinette County so you know who to call with questions or concerns.

Amanda Kostner
Information & Education Specialist
Land & Water Conservation Division
Marinette County Land Information Dept.
Phone: 715-732-7784
E-mail: *akostner@marinettecounty.com*

What things do you do as part of your job?
I educate people in as many ways as possible about our natural environment and how to conserve it. One way is by visiting schools, 4-H clubs, and scouting groups around the county to present nature and science lessons and activities through our environmental education program Teaching Outdoor Awareness and Discovery (TOAD). Another way is by publishing lake association newsletters and this paper, the *Northwoods Journal*, press releases for the local newspapers, and brochures to publicize events and programs our department offers. Producing interpretive trail guides and signs is another way I teach about our natural environment. Lastly, I plan and publicize educational events such as the annual 4th Grade Environmental Field Days, the annual Peshtigo River Trail Canoe Trip, spring frog hikes and many others.

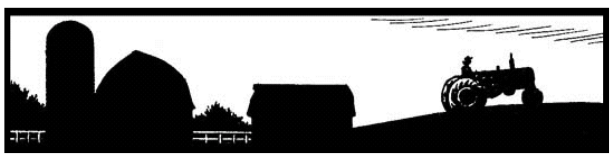
What is environmental education and how is it an important part of conservation efforts?
The goal of environmental education is *"To help people become environmentally aware, knowledgeable, skilled, dedicated citizens who are committed to defending, improving, and sustaining the quality of the environment on behalf of present and future generations."* It is something that can start early in life and should continue throughout. With environmental education, young children learn to be aware of their natural surroundings and connect with the things they see, touch, hear, and smell. Older kids and adults gain concrete knowledge about these things in nature and learn how they are interconnected. Eventually they can develop an environmental ethic by learning how their actions can prevent or cause environmental problems. A community of knowledgeable, dedicated people goes a long way when planning conservation efforts or resolving environmental problems.

What is your favorite part of your job?
When a kid takes a particular interest in something we are studying in nature or an activity such as collecting aquatic insects. A light seems to go on inside them and I know they will remember this experience and hopefully take it with them through life. That's what inspired me as a child, and I try to pass that on.

"Amanda's Message"
We are lucky to live in an area with such natural beauty. Don't take it for granted. Slow down; get out of your car or off your ATV. Take a closer look. Learn about it. *Experience it*. Only when we really know our natural environment can we make wise decisions to conserve and protect it for future generations.

MANURE continued

manure are in the spring before crops are planted and in the fall after crop fields have been harvested. The key to proper manure management is having the ability to store the manure until it can be land spread. For more



than ten years the LWCD has been working hard to help county farmers voluntarily install manure storage facilities. The LWCD has designed, cost-shared, and provided technical assistance for the construction of twenty-nine manure storage facilities since 1995. These projects have ended winter manure spreading on more than 18,000 acres. That's more than 28 square miles. Having a manure storage facility allows farmers to develop and follow nutrient management plans that protect our groundwater, lakes, and streams while saving themselves time and money.

Four more manure storage facilities are under construction in 2006. These projects will protect groundwater and end winter manure spreading on lands that drain to Lake Noquebay, Beaver Creek, Menominee River and Peshtigo River. For more info and to see pictures of manure storage facilities and other best management practices, visit: *www.marinettecounty.com/lw_ps_bmp_ag.htm*

Where in Marinette County?

Tell us where this picture was taken and you could win a prize!

Send us a note including your name, address, and phone or go to *www.marinettecounty.com/lw_home.htm* to give us your answer.
Any interesting facts about the subject are also welcome.
Please respond by July 14, 2006
Correct answers will be entered into a drawing to win a Harmony Arboretum tote bag and a birdhouse built and donated by the 6th Graders from Peshtigo Middle School.

The winner of the June contest was John Tess of Green Bay who knew this shrine is located along Benson Lake Road in the Town of Silver Cliff. Special thanks to Mr. Alvin Schaut of Pound who took the time to do a little research on this site. He writes, "An avid fisherman who fished in the area became lost sometime in the 1930's, and eventually came out at the present day location of the shrine and was so relieved that he decided to build a shrine there. The shrine was built and maintained by local residents of the Silver Cliff area. Other concerned people helped maintain the shrine as well. At different times a notebook found in the steel box listed names of people far and near who visited the shrine and of people that revisit the shrine, who before visiting the shrine had some misfortune befall them and were relieved, or to have an affliction and it disappeared so it would seem nothing less than a miracle. At one time the notebook was so full of names and of miraculous stories that a local church I believe retained these papers for safekeeping. For anyone who enjoys the scenic beauty of the Northwoods, a visit to this shrine is worth the trip."

THE PIKE continued

forks, the DNR has provided numerous walk-in access points with parking and trails to the river. Look for the small Wild River signs and well used parking areas on roads that parallel the river. As you proceed upstream, most of the tributaries to the Pike are located on Marinette County forestland and open to the public. KC Creek and Harvey Creek are especially well known for their abundant brookies. A Marinette County plat book or outdoor recreation map is valuable for navigating the numerous forest roads and determining where private land is located while exploring these streams.

If you prefer exploring your rivers from the water, leave the motorboat at home and break out the canoe or kayak. Because it is such a high gradient stream the water is typically swift with numerous riffles and occasional rapids and falls that range from Class I (easily negotiated) to Class V (should be attempted by experts only). The river from Highway 141 to the Menominee River is the most popular section and typically contains sufficient water for an enjoyable float. The scenery here is virtually unspoiled with attractive rock outcrops and very few cottages. Between Highway 141 and County Highway K the river is suitable for novice paddlers except for Powerline Rapids, a short Class II drop about a mile downstream from the put-in. The rapids is under the power lines and can be portaged on the right side of the river. Between Highway K and the Menominee River there are several Class II rapids and a serious Class III rapid just below the Barker Road Bridge. A DNR takeout with parking can be found just before the bridge if you wish to avoid this drop known locally as Yellow Bridge Falls.

The more adventuresome paddler may wish to explore the Pike River upstream from Dave's Falls. Both the North Branch and South Branch of the Pike are navigable by small boat for many miles upstream from their confluence. The North Branch is reportedly navigable as far upstream as Carney Rapids on Old County A and the South Branch below Horseshoe Falls. If you attempt the upper river avoid periods of very low water and be prepared for occasional downed trees and other obstructions, many unnamed rapids, and spectacular scenery.

So hop in the car and take the waterfalls tour or grab your fishing pole. Explore the Pike and you will soon see why it is a favorite among locals and visitors alike.

Wishigan Outdoor Club

Marinette, Wisconsin * Menominee, Michigan

www.wishigan.org

This is a recreational club for those who love the outdoors, enjoy silent sports, and welcome the company of others in outdoor activities. Check out the website for some of the trips and activities already scheduled for this month. Guests are welcome.

July 10: July Meeting; Lawn Game Night

July 15: Peshtigo River Trail paddle trip

Area Events Calendar

July 4 **Crivitz Area 4th of July Celebration**
Parade, games, fireworks. Ice cream social 10am – 2pm at St. Mary's Parish Center.

July 4 **Marinette Area 4th of July Celebration**
Parade, children's games, fireworks. 800-236-6681

July 14-16 **Niagara Lions Club Community Picnic**
Heights Park. Co-ed kickball tournament, food and beverages, games and entertainment. Fireworks Saturday night. Parade and raffle on Sunday.

July 15 **Wagner Firefighters Fundraising Picnic**
Menominee River County Park, Hwy 180 & County X. 11am – 9pm. Food, drink, raffles, prizes, horseshoe tournament, children's games, live music. 715-732-9593

July 21-23 **Coleman 11th Annual Firemen's Picnic**
Albers Memorial Field. Food, drinks, raffles, prizes, children's games, horseshoe, volleyball, and softball tournaments. Parade Saturday 10am. Live music Friday night and Saturday. Fireworks at dusk on Saturday. 920-897-4254

July 27-28 **Regatta of Great Lakes 70's**
70-ft. sailboat regatta at Great Lakes Memorial Marina Park in Menominee, MI. Cocktail party Friday night, M&M Yacht Club. 906-863-6469

July 2006

All programs are free unless otherwise stated.

July 11 ***Herbs*** **7:00-8:00 p.m.**
The public is invited to join the Northern Lights Master Gardeners at their monthly meeting for a presentation by herbalist Jane Cole. Call UWEX for more information.

July 15 ***Plant Pest Clinic*** **9:00 a.m.-Noon**
Bring your plant, insect, and disease sample to Harmony and let Scott Reuss, UWEX Horticulture Agent, identify the problem and help you set up management steps.

Spokes & Folks Bicycle Club

www.spokesandfolks.com

Guests are welcome, helmets are required. Lights are recommended on some rides.

July 2006 Ride Schedule
(See website for more details)

Luigi's Dinner Ride
July 13 5:30 p.m.
Riders wishing to partake in dinner at Luigi's need to make reservations with the Lata's at 715-735-5961.

Menominee County River Ride
July 15 8:00 a.m.
From Marinette City Park into Menominee County and returning on River Road. Rest stop at Gary's Grocery Store in Wallace.

Triple Loop 100 Mile Century Ride
July 29
Three loops (40, 30, and 20 miles) all starting and returning to Marinette City Park.

Sunday Morning Breakfast Rides
Bring your family, bring your appetite. Riders will ride to and from breakfast for a social ride great for all levels.

Wednesday Fast Rides
6:00 p.m.
This is a super fast drop ride. Anyone can join, but if you aren't keeping up, you will be left behind, or dropped.

Wednesday Easy-Pedal Rides
The pace is easy, suitable for children, beginners and recreational riders. Rides are 12 – 16 miles long.